

**LIN ET AL. U.S. PATENT NO. 5,071,520 WHICH THAT  
MERELY “RESEMBLES” CLAIMS 1, 3, 5, 6, and 10-12  
DOES NOT ANTICIPATE THOSE CLAIMS**

Claim 1 (and thus claims 2 and 5 which depend from claim 1) is directed to a copper foil for lamination to a dielectric substrate, and specifically requires that the copper foil is “smooth”. Similarly, claim 6 (and thus claims 10-12 which depend from claim 6) is directed to an article comprising copper foil having a “smooth” surface.

“Smooth” as defined in the present application (e.g., page 5, ll. 138-140) distinguishes over the copper foil in the ‘520 patent. In contrast the ‘520 patent teaches that “To maximize adhesion, it is desirable to roughen the surface of the foil which contacts the dielectric prior to bonding” Col. 1, ll. 34-36. The ‘520 patent further teaches specific methods of roughening the surface (Col. 1, ll. 36-48; Col. 3, ll. 28-39), including forming a “plurality of dendrites” (col. 2, ll. 43; col. 3, ll. 23; col. 3, ll. 28), and speaks of “the roughened or dendritic side of the foil” surface (col. 3, ll. 43). Each of the Examples A through E in the ‘520 patent involved an electrodeposited copper foil, which is understood by a person of ordinary skill in the art as indicating the foil is rough. The Printed Circuit Board Materials Handbook, McGraw-Hill (1997). page 7.6, which accompanied the Amendment of November 18, 2005, explains that the electrodeposited copper has a matte side “which contributes a microscopically roughened structure”. The Handbook explains that matte side is one that is typically treated to bond or adhere various dielectric materials.

The ‘520 patent does not teach that the “sheets, strips, foil and slab materials” are smooth. In fact, the Affidavit of William L. Brenneman establishes that the ‘520 patent does not teach or suggest “a smooth copper foil having a peel strength enhancement